

Kentucky Department of Education
Science Adoption 2008-2014

Provided by the Publisher

ISBN - 1588921522		Publisher - Delta Education LLC dba CPO Science	
Physics A First Course			
Type - P2	Author - Tom Hsu Ph.D.		
Copyright - 2005	Edition - 1st	Readability - 1060	
Course - 304899-Special Topics Physcis 8-12		Grade(s) - 9, 10, 11, 12	
Teacher Edition ISBN if applicable		1588921433	

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Overall Recommendation:

☒ **Recommended as Basal**

Overall Strengths, Weaknesses, Comments:

This text is a well thought out text that aligns well to the POS content traditionally taught in a physics class. The teacher's edition contains an introduction and review of content for each chapter. The inclusion of a an investigations manual with laboratory activities is a plus. Resources are aligned with the text well.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

☐ Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 7 Big Ideas of science to the following extent:

- | | |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| a) Structure and Transformation of Matter | <input type="checkbox"/> Strong <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| b) Motion and Forces | <input checked="" type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| c) The Earth and the Universe | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input checked="" type="checkbox"/> N/A |
| d) Unity and Diversity | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input checked="" type="checkbox"/> N/A |
| e) Biological Change | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input checked="" type="checkbox"/> N/A |
| f) Energy Transformation | <input type="checkbox"/> Strong <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Little <input type="checkbox"/> N/A |
| g) Interdependence | <input type="checkbox"/> Strong <input type="checkbox"/> Moderate <input type="checkbox"/> Little <input checked="" type="checkbox"/> N/A |

2) Addresses content-specific enduring understandings from the related Program of Studies standards.

☒ Strong ☐ Moderate ☐ Little ☐ N/A

3) Addresses content-specific skills and concepts from the related Program of Studies standards.

☒ Strong ☐ Moderate ☐ Little ☐ N/A

Kentucky Department of Education
Science Adoption 2008-2014

4) **Content addressed is current, relevant and non-trivial** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

5) **Provides opportunities for critical thinking/reasoning** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

6) **Strengths, Weaknesses, Comments:**

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

There are little or no biologically related topics/concepts represented in this text, but as this is an physics text, that is to be expected. The activities in the investigation use materials specific to the CPO program. Content from the text seems to be of an appropriate level and complexity.

B. Functionality & Suitability

☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

1) **Suitability** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) **Content quality** ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community

3) **Connections to Literacy**

Note: may apply to either student or teacher editions

☒ Strong ☐ Moderate ☐ Little

- Employs a variety of reading levels and is grade/level appropriate
- Contains pre, during, post reading activities
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- Engaging text- does the text facilitate learning?
- Does understanding the text require having performed the imbedded activities?

4) **Connections to Technology** ☐ Strong ☒ Moderate ☐ Little

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data

5) Support for Diverse Learners

☐ Strong ☐ Moderate ☒ Little

- Provides support for ESL students
 - Provides support for differentiation of instruction in diverse classrooms
- Note: may apply only to teacher edition*

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

There is no apparent support for ELL students, or suggestions for differentiated instruction. Technology is used in conjunction with laboratory investigations and the equipment being used. There did not appear to be any type of bias in the course of reviewing the text. The content appeared to be of appropriate complexity and correctness. Embedded into the text are vocabulary lists, section objectives, intermittent comprehension checks, section reviews, and chapter questions. A diverse set of literacy strategies was not evident.

C. Supports Inquiry and Skill Development

☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

1) Promotes Inquiry, research and Application of Learning

☐ Strong ☒ Moderate ☐ Little

- Provides opportunities for inquiry and research that includes activities such as self-selecting topics, formulating authentic questions, gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, time lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

Note: may apply to either teacher or student edition

2) Skill Development

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities to make sense of data
- Provides opportunities for critical thinking and reasoning (analyze arguments, distinguish fact/opinion, recognize bias)
- Provides opportunities to examine a range of types of evidence
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

Inquiry activities are found in the investigation manual. The text provides students the opportunity to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.). The text uses a variety of relevant charts, graphs, diagrams, connections, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills. There are a variety of activities associated with the structure of the text that support learning essential skills and content. These activities are related to concepts discussed in the text.

D. Supports Best Practices of Teaching and Learning

☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

1) Engages Students

☒ Strong ☐ Moderate ☐ Little

- Includes content geared to the needs, interests, and abilities of students
 - Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
 - Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
 - Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
 - Activities are truly congruent to the concepts addressed, not merely correlated
- Note: may apply to either teacher or student edition*

2) Uses Assessment to Inform Instruction

☐ Strong ☒ Moderate ☐ Little

- Includes multiple means of assessment as an integral part of instruction
 - Provides evaluation measures in the teacher edition that supports differentiated learning activities
 - Embedded assessments reflect a variety of Depth of Knowledge levels
- Note: may apply to either teacher or student edition*

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

The questions that are within the text do not contain many questions that reach higher level thought and higher DOK levels. The assessment does not occur in a great variety of manners. There are embedded questions and chapter review questions.

E. Has an Organization/ Format that Supports Learning and Teaching

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Organizational Quality

☒ Strong ☐ Moderate ☐ Little

- Print and/or electronic materials present minimal barriers to learners

Kentucky Department of Education
Science Adoption 2008-2014

- Presents chapters/lessons in an organized and logical sequence
 - Provides clearly stated objectives for each lesson.
 - Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
 - Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components) as either student or teacher resources
 - Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
 - Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
 - Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

☒ Strong ☐ Moderate ☐ Little

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The text is logical and sequential. Concepts build upon themselves as you progress throughout the units. The text organizations makes use of text features that enhance readability. Graphics are many and captioned. The glossary encompasses the terms discussed in the text. The laboratory materials do a great job of supporting the text content being covered.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

☐ Strong Evidence
☐ Moderate Evidence
☒ Little or No Evidence

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

No ancillary/gratis materials were available for review.